WHAT IS CLAIMED IS:

1. A dispersion fluid filtration and delivery system for filtering a dispersion fluid from a storage vessel and delivering a filtrate thereof to a filtrate using operation, the dispersion fluid filtration and delivery system comprising:

(a) a filter device having an inlet port, a first outlet port for connecting to the storage vessel, and a second outlet port for connecting to the filtrate using operation;

(b) an inlet pump connected between said inlet port and the storage vessel for pumping a first quantity Q_{in} of dispersion fluid from the storage vessel through said inlet port into said filter device; and

(c) an outlet pump connected between said first outlet port and the storage vessel for positively pumping a second quantity Q_{out} of dispersion fluid from said filter device back into said storage vessel, said outlet pump and said inlet pump being sized and controlled so that Q_{out} is less than Q_{in}, and so that resulting filtrate flow Q_r from said filter device through said second outlet port to the filtrate using operation is equal to $Q_{in} - Q_{out}$.

2. The dispersion fluid filtration and delivery system of **Claim 1**, including a single common drive motor for driving said inlet pump and said outlet pump.

3. The dispersion fluid filtration and delivery system of **Claim 1**, wherein said inlet pump and said outlet pump have common shared controls for ensuring simultaneous operation.

4. The dispersion fluid filtration and delivery system of **Claim 1**, wherein said filter device is a crossflow filter.

5. The dispersion fluid filtration and delivery system of **Claim 1**, further comprising a diverter valve having an inlet connected to second outlet port of said filter device, a first outlet connected to the filtrate using operation, and a second outlet connected to the storage vessel for enabling continuous operation of the filtration assembly during an interruption of the filtrate using operation.

6. The dispersion fluid filtration and delivery system of **Claim 1**, wherein said filter device is located in close proximity to the filtrate using operation in an operating area and remotely from said inlet pump and said outlet pump so as to minimize a risk of flocculation of the filtrate between said filter device and the filtrate using operation.

7. The dispersion fluid filtration and delivery system of **Claim 3**, wherein said shared common controls are connected to a filtrate using data acquisition and control interface.

8. The dispersion fluid filtration and delivery system of **Claim 3**, wherein said shared common controls are set such that Q_r = RPM x (C_{in} - C_{out}), where Q_r is the rate of filtrate flow through the filter medium; RPM is the pump speed in revolutions per minute; C_{in} is the capacity of the inlet pump 110 in cubic centimeters of liquid per pump shaft revolution; and C_{out} is the capacity of the outlet pump 120 in cubic centimeters of liquid per pump shaft revolution.

9. The dispersion fluid filtration and delivery system of **Claim 4**, wherein said crossflow filter comprises a housing, a porous filter medium contained within said housing and including a first surface and a second surface, a first passageway through said housing contiguous with at least a portion of said first surface of said porous filter medium, and a second passageway through said housing contiguous with at least a portion of said second surface of said porous filter medium.

10. The dispersion fluid filtration and delivery system of **Claim 5**, including switching means for switching said diverter valve between flow to the filtrate using operation and flow back to the storage vessel.

11. A method of filtering and delivering a fluid dispersion from a storage vessel to a filtrate using operation comprising:

(a) first pumping fluid dispersion at an input rate Q_{in} from the storage vessel into an inlet port of a filter device having a filter medium, a first outlet port connected back to the storage vessel, and a second outlet port connected to the filtrate using operation;

(b) next pumping fluid dispersion at a first output rate Q_{out} from the filter device through said first outlet port for return to said storage vessel, wherein said first output rate Q_{out} is less than said input rate Q_{in};

(c) directing filtrate fluid from the filter device through said second outlet port at a second output rate Q_r through said filter medium, wherein said second output rate Q_r is equal to $Q_{out} - Q_{in}$; and

(d) next directing the filtrate fluid from said second outlet port to said filtrate using operation at the second output rate of $Q_{out}-Q_{in}$.

12. The method of **Claim 11**, wherein said pumping and said next pumping steps include using a single common drive motor for driving said inlet pump and said outlet pump.

13. The method of **Claim 11**, wherein said pumping and said next pumping steps include using common shared controls for controlling said inlet pump and said outlet pump.

14. The method of **Claim 11**, wherein said directing step includes using a crossflow filter device.

15. The method of **Claim 11**, further comprising a diverter valve having an inlet connected to second outlet port of said filter device, a first outlet connected to the filtrate using operation, and a second outlet connected to the storage vessel for enabling continuous operation of the filtration assembly during an interruption of the filtrate using operation.

16. The method of **Claim 11**, wherein said next directing step includes locating the filter device in close proximity to the filtrate using operation in an operating area and remotely from said inlet pump and said outlet pump so as to minimize a risk of flocculation of the filtrate between said filter device and the filtrate using operation.

17. The method of **Claim 13**, wherein said shared common controls are connected to a filtrate using data acquisition and control interface.

18. The method of **Claim 13**, wherein said shared common controls are set such that $Q_r = RPM \times (C_{in} - C_{out})$, where Q_r is the rate of filtrate flow through the filter medium; RPM is the pump speed in revolutions per minute; C_{in} is the capacity of the inlet pump 110 in cubic centimeters of liquid per pump shaft revolution; and C_{out} is the capacity of the outlet pump 120 in cubic centimeters of liquid per pump shaft revolution.

19. The method of **Claim 14**, wherein said crossflow filter comprises a housing, a porous filter medium contained within said housing and including a first surface and a second surface, a first passageway through said housing contiguous with at least a portion of said first surface of said porous filter medium, and a second passageway through said housing contiguous with at least a portion of said second surface of said porous filter medium.

20. The method of **Claim 15**, including switching means for switching said diverter valve between flow to the filtrate using operation and flow back to the storage vessel.